LOSS OF ENTIRE LOWER LIP.

REPAIR BY FLAP FROM THE ARM.

BY STEPHEN WATTS, M.D., of BALTIMORE,

Assistant Resident Surgeon, Johns Hopkins Hospital.

THE following case is that of a boy, fifteen years of age, who was admitted to the service of Dr. Halsted on July 6, 1904, with the history of having had his lower lip bitten off two days before by a circus pony with which he was playing.

On examination, the entire lower lip was found to be absent, even the periosteum of the lower jaw having been stripped off in places. The wound was clean and free from infection.

Considering the great extent of the wound, it was thought best to cover the defect with a flap from the arm rather than to attempt to obtain a flap from the face or neck. Accordingly, a large flap was dissected up from the right upper arm. This flap, which included skin and subcutaneous fat, was about twelve centimetres in width and eighteen centimetres in length. Its under surface and the raw surface of the arm, from which it was taken, were covered with grafts removed from the thighs. All of these grafts took well, and at the end of ten days we had a flap with skin upon both sides. Some of the skin upon its under surface was intended to form a substitute for mucous membrane upon the unattached portion of the lip, and to some extent prevent subsequent contracture.

The patient had a bad bronchitis for some time following this operation, and further operative procedure was thus postponed more than a month. During this delay, the flap, which had already become considerably shortened by the sloughing of its distal extremity, due to imperfect circulation, contracted to a wonderful extent. (Fig. 2.)

On August 18 we dissected up the flap somewhat farther, in

¹ Read before the Johns Hopkins Hospital Medical Society, October 17, 1904.

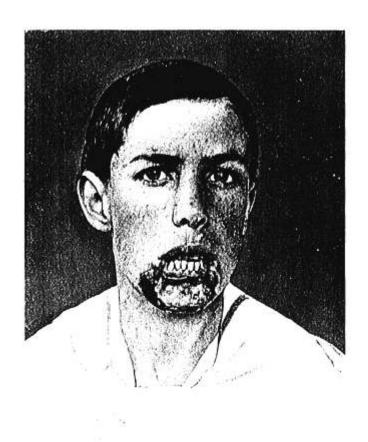


Fig. 1.—Condition before beginning treatment; entire lower lip absent, exposing lower jaw.

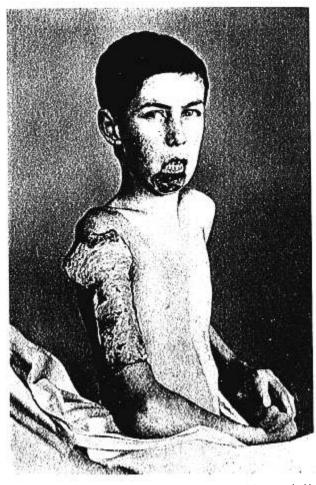


Fig. 2.—Flap-prepared grafts upon arm and upon under surface of flap covered with silver foil.



 ${\rm Fig.}~_3$ — Flap brought up to face. (Photograph taken on operating-table.)



FIG. 4.—Plaster bandage holding arm in place.

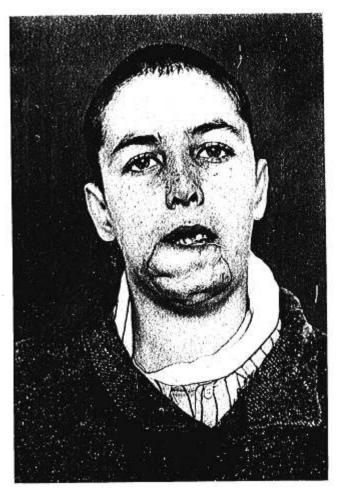


Fig. 5.—Final result.

order to lengthen it as much as possible, and then sutured its free extremity to the left side of the wound in the lip. A small portion of the vermilion border, which had been preserved on this side, was sutured along the upper edge of the flap.

The arm was held in place by means of a plaster cast for a period of about three weeks. The flap was then severed from the arm. This was done under local anæsthesia in several stages to allow the circulation to become more perfectly established.

The patient seemed very comfortable in the cast, the strained position of the arm causing almost no pain. At two subsequent operations, at intervals of two or three weeks, the lower and right borders of the flap were trimmed up and sutured in position. A very good functional and cosmetic result was thus obtained.

The accompanying photographs show very clearly the various stages of the operation.